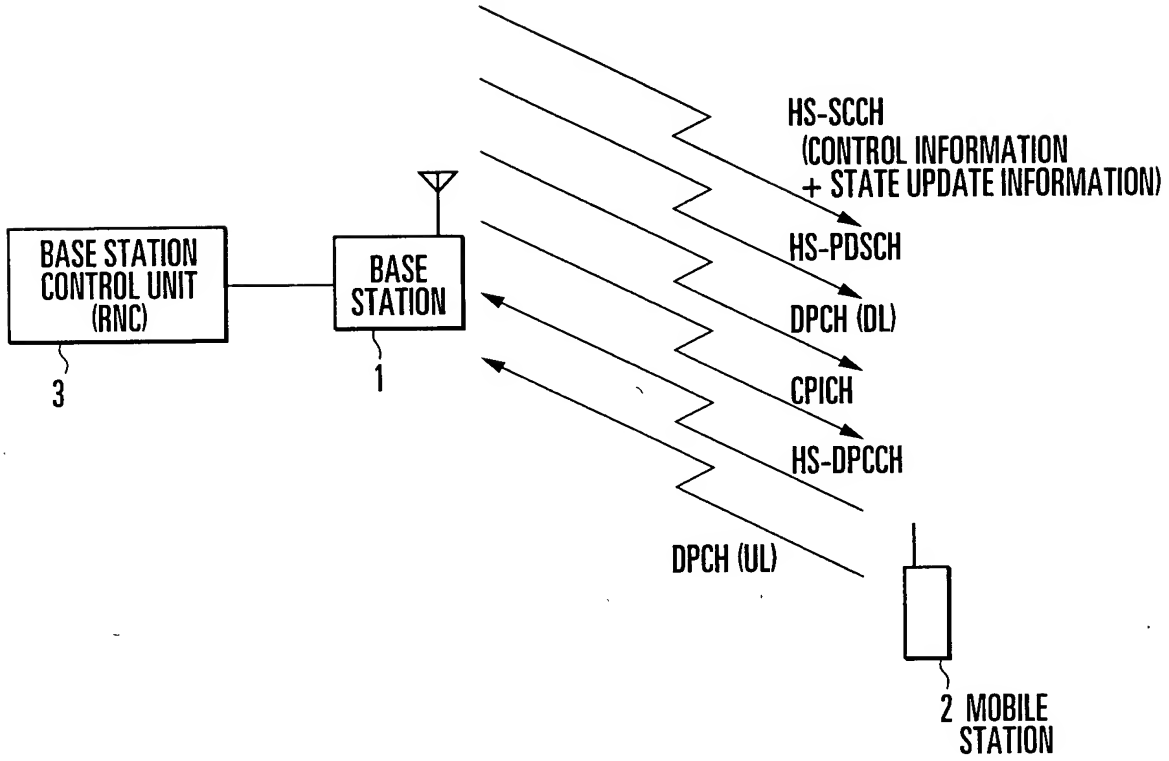
HS-SCCH
(CONTROL INFORMATION
+ STATE UPDATE INFORMATION)
HS-PDSCH
DPCH (DL)
CPICH
HS-DPCCH
DPCH (UL)
BASE STATION
CONTROL UNIT
(RNC)
3
BASE
STATION
1
2 MOBILE
STATION

FIG. 1

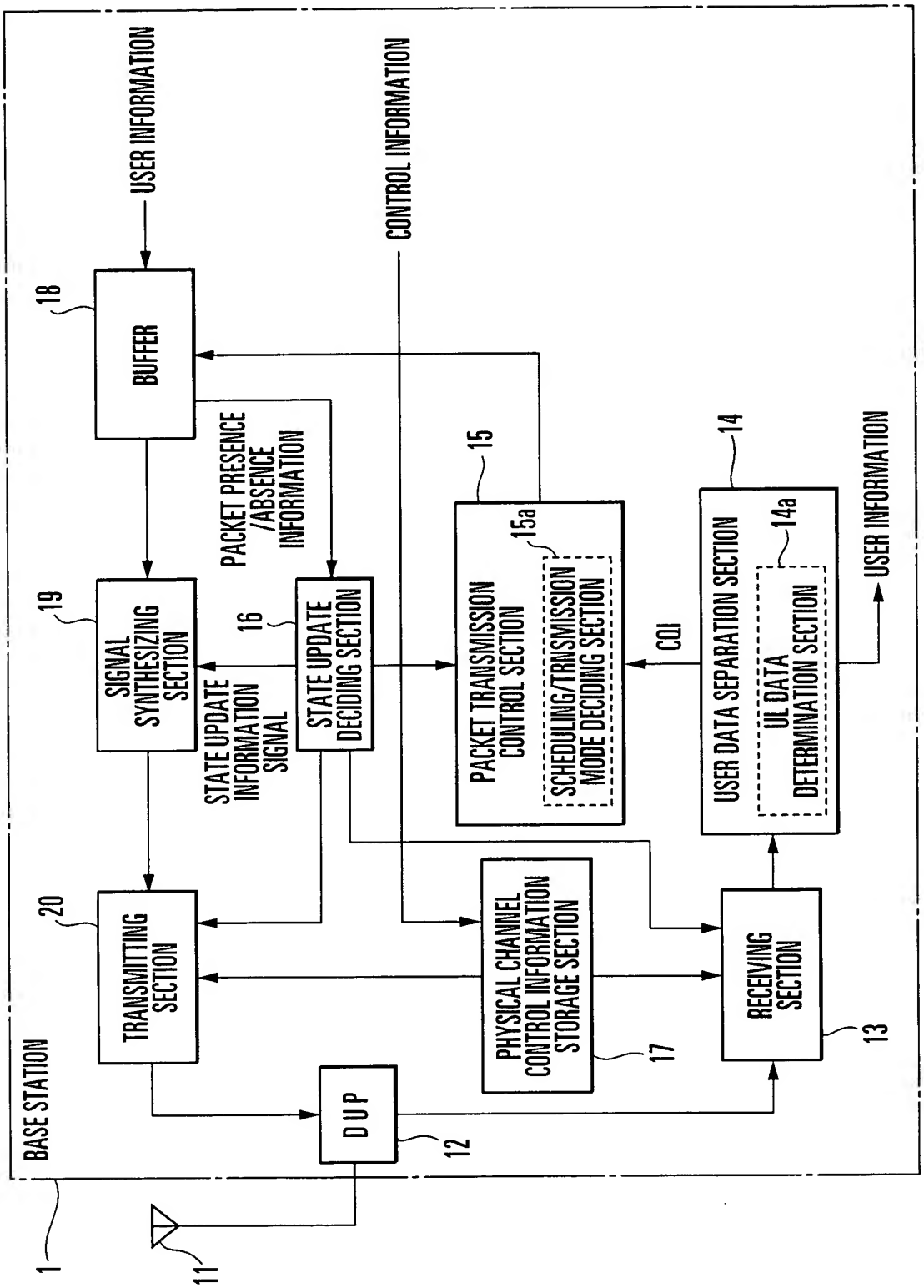
USER INFORMATION
CONTROL INFORMATION
BUFFER
18
PACKET PRESENCE /ABSENCE INFORMATION
SIGNAL SYNTHESIZING SECTION
19
STATE UPDATE INFORMATION SIGNAL
STATE UPDATE DECIDING SECTION
16
PACKET TRANSMISSION CONTROL SECTION
15
SCHEDULING/TRNSMISSION MODE DECIDING SECTION
15a
CQI
USER DATA SEPARATION SECTION
14
UL DATA DETERMINATION SECTION
14a
USER INFORMATION
TRANSMITTING SECTION
20
PHYSICAL CHANNEL CONTROL INFORMATION STORAGE SECTION
17
RECEIVING SECTION
13
DUP
12
BASE STATION
1
11

FIG. 2

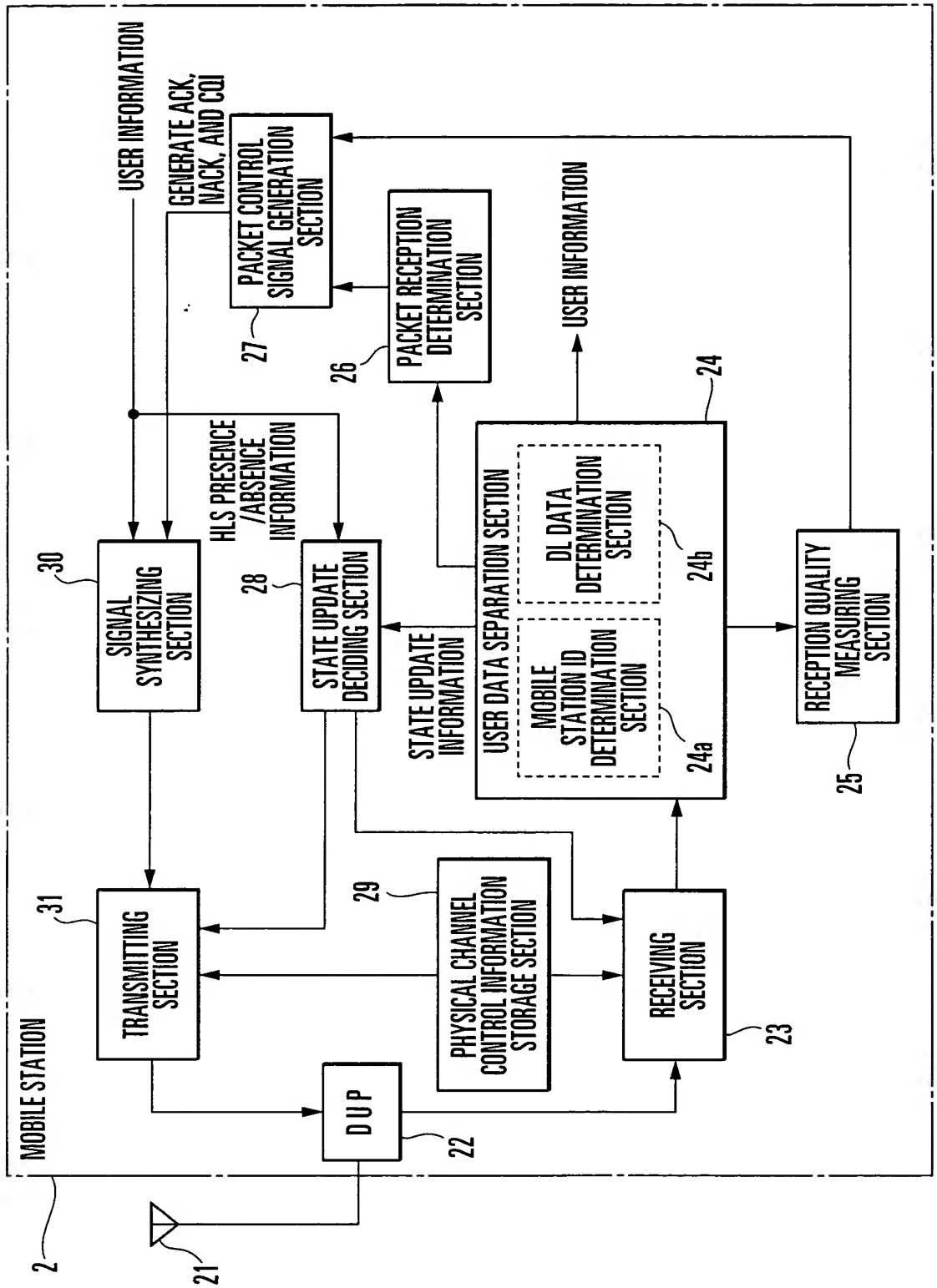
MOBILE STATION
2
21
ANTENNA
22
DUP
23
RECEIVING SECTION
24
USER DATA SEPARATION SECTION
24a
MOBILE STATION ID DETERMINATION SECTION
24b
DL DATA DETERMINATION SECTION
25
RECEPTION QUALITY MEASURING SECTION
26
PACKET RECEPTION DETERMINATION SECTION
27
PACKET CONTROL SIGNAL GENERATION SECTION
28
STATE UPDATE DECIDING SECTION
29
PHYSICAL CHANNEL CONTROL INFORMATION STORAGE SECTION
30
SIGNAL SYNTHESIZING SECTION
31
TRANSMITTING SECTION
USER INFORMATION
GENERATE ACK, NACK, AND CQI
HLS PRESENCE /ABSENCE INFORMATION
STATE UPDATE INFORMATION
USER INFORMATION

FIG. 3

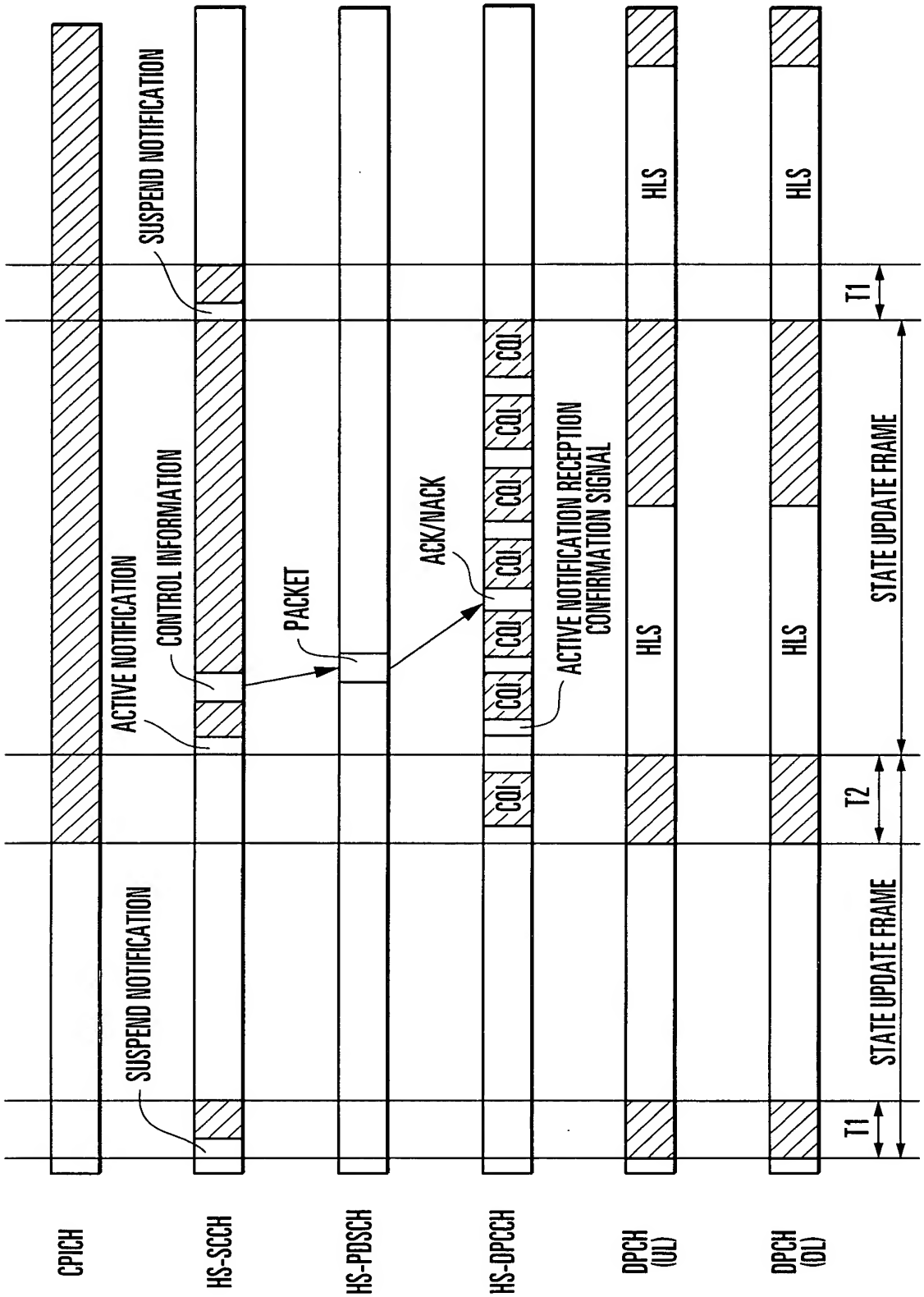
CPICH
HS-SCCH
HS-PDSCH
HS-DPCCH
DPCH (UL)
DPCH (DL)
SUSPEND NOTIFICATION
ACTIVE NOTIFICATION
CONTROL INFORMATION
PACKET
ACK/NACK
CQI
ACTIVE NOTIFICATION RECEPTION CONFIRMATION SIGNAL
HLS
T1
T2
STATE UPDATE FRAME
SUSPEND NOTIFICATION
T1
STATE UPDATE FRAME

FIG. 4

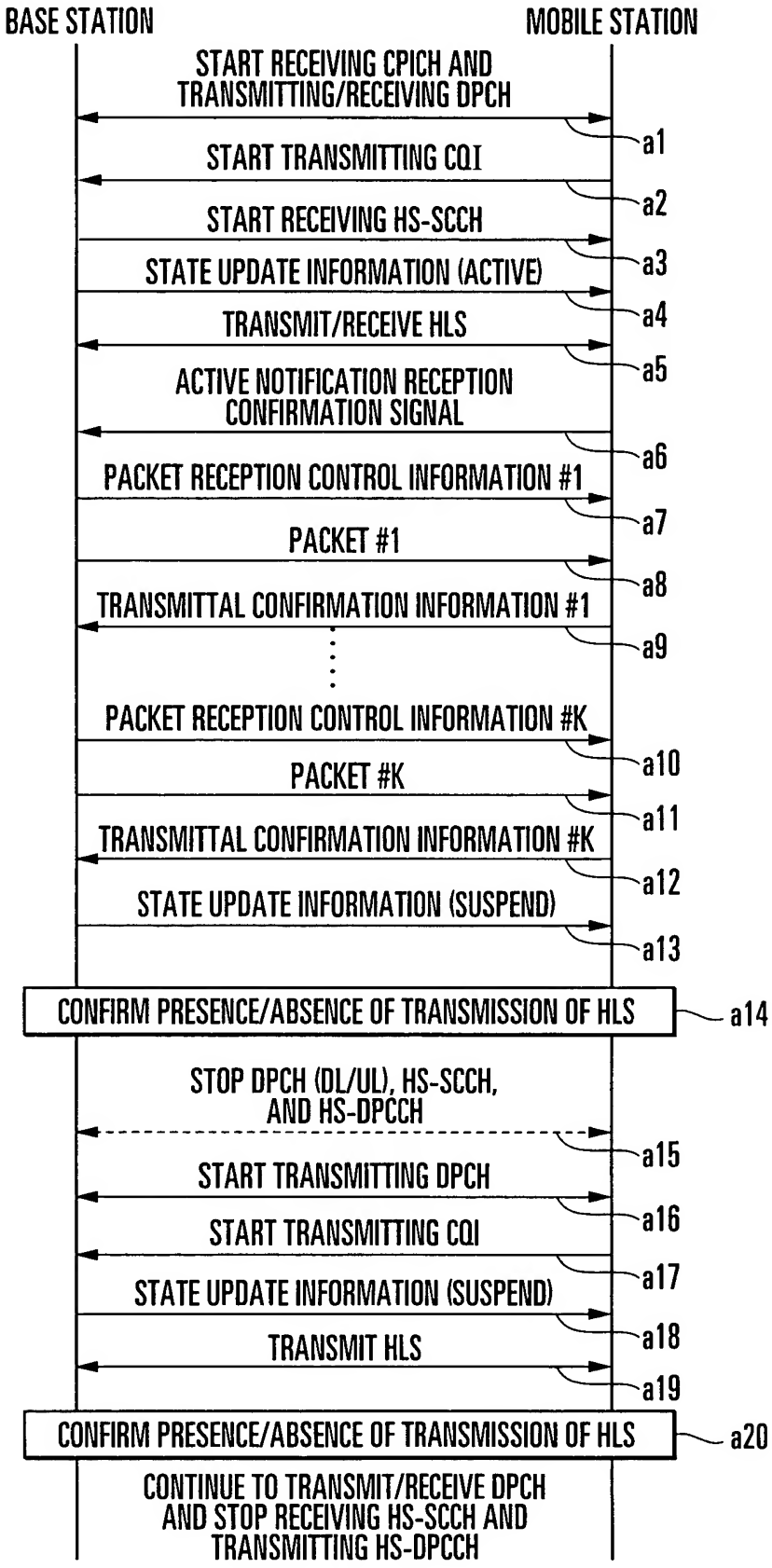
BASE STATION
MOBILE STATION
START RECEIVING CPICH AND TRANSMITTING/RECEIVING DPCH
a1
START TRANSMITTING CQI
a2
START RECEIVING HS-SCCH
a3
STATE UPDATE INFORMATION (ACTIVE)
a4
TRANSMIT/RECEIVE HLS
a5
ACTIVE NOTIFICATION RECEPTION CONFIRMATION SIGNAL
a6
PACKET RECEPTION CONTROL INFORMATION #1
a7
PACKET #1
a8
TRANSMITTAL CONFIRMATION INFORMATION #1
a9
PACKET RECEPTION CONTROL INFORMATION #K
a10
PACKET #K
a11
TRANSMITTAL CONFIRMATION INFORMATION #K
a12
STATE UPDATE INFORMATION (SUSPEND)
a13
CONFIRM PRESENCE/ABSENCE OF TRANSMISSION OF HLS
a14
STOP DPCH (DL/UL), HS-SCCH, AND HS-DPCCH
a15
START TRANSMITTING DPCH
a16
START TRANSMITTING CQI
a17
STATE UPDATE INFORMATION (SUSPEND)
a18
TRANSMIT HLS
a19
CONFIRM PRESENCE/ABSENCE OF TRANSMISSION OF HLS
a20
CONTINUE TO TRANSMIT/RECEIVE DPCH AND STOP RECEIVING HS-SCCH AND TRANSMITTING HS-DPCCH

FIG. 5

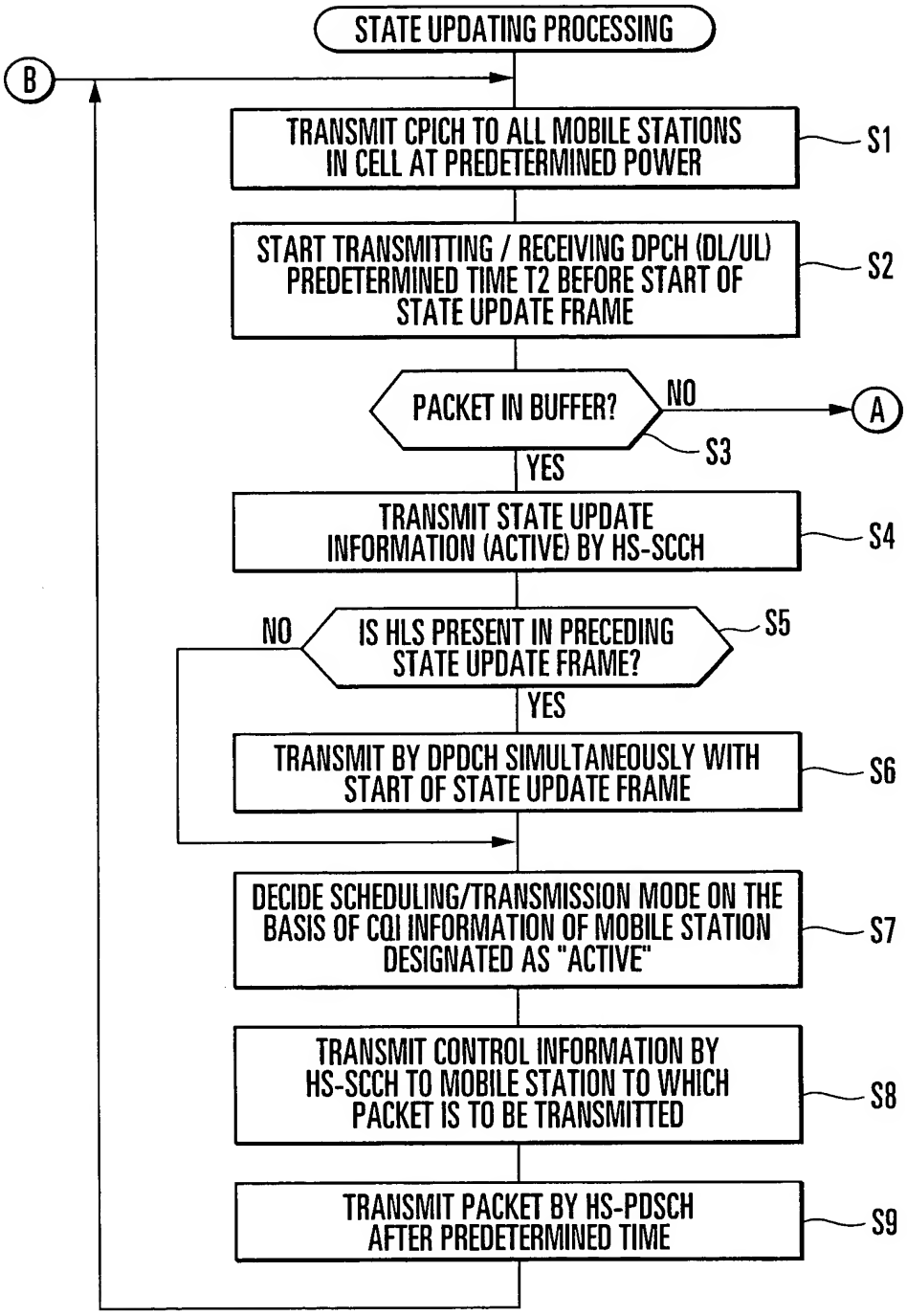
STATE UPDATING PROCESSING
B
TRANSMIT CPICH TO ALL MOBILE STATIONS IN CELL AT PREDETERMINED POWER
S1
START TRANSMITTING / RECEIVING DPCH (DL/UL) PREDETERMINED TIME T2 BEFORE START OF STATE UPDATE FRAME
S2
PACKET IN BUFFER?
NO
A
S3
YES
TRANSMIT STATE UPDATE INFORMATION (ACTIVE) BY HS-SCCH
S4
NO
IS HLS PRESENT IN PRECEDING STATE UPDATE FRAME?
S5
YES
TRANSMIT BY DPDCH SIMULTANEOUSLY WITH START OF STATE UPDATE FRAME
S6
DECIDE SCHEDULING/TRANSMISSION MODE ON THE BASIS OF CQI INFORMATION OF MOBILE STATION DESIGNATED AS "ACTIVE"
S7
TRANSMIT CONTROL INFORMATION BY HS-SCCH TO MOBILE STATION TO WHICH PACKET IS TO BE TRANSMITTED
S8
TRANSMIT PACKET BY HS-PDSCH AFTER PREDETERMINED TIME
S9

FIG. 6

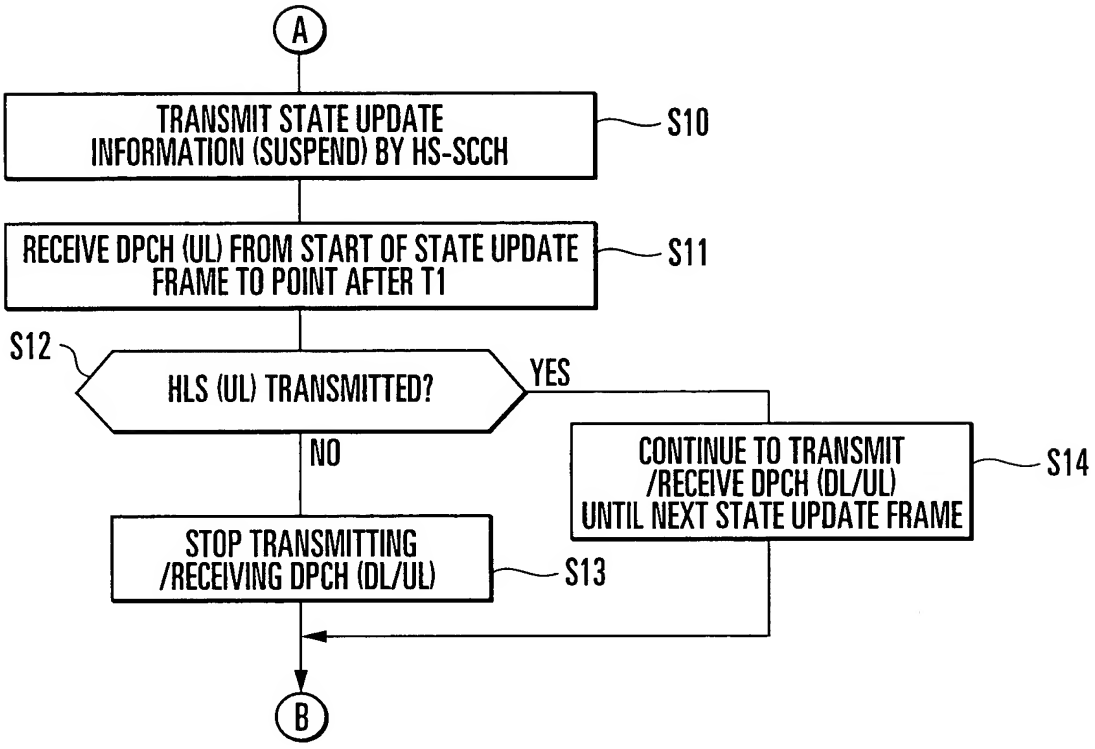
A
TRANSMIT STATE UPDATE INFORMATION (SUSPEND) BY HS-SCCH
S10
RECEIVE DPCH (UL) FROM START OF STATE UPDATE FRAME TO POINT AFTER T1
S11
S12
HLS (UL) TRANSMITTED?
YES
NO
CONTINUE TO TRANSMIT /RECEIVE DPCH (DL/UL) UNTIL NEXT STATE UPDATE FRAME
S14
STOP TRANSMITTING /RECEIVING DPCH (DL/UL)
S13
B

FIG. 7

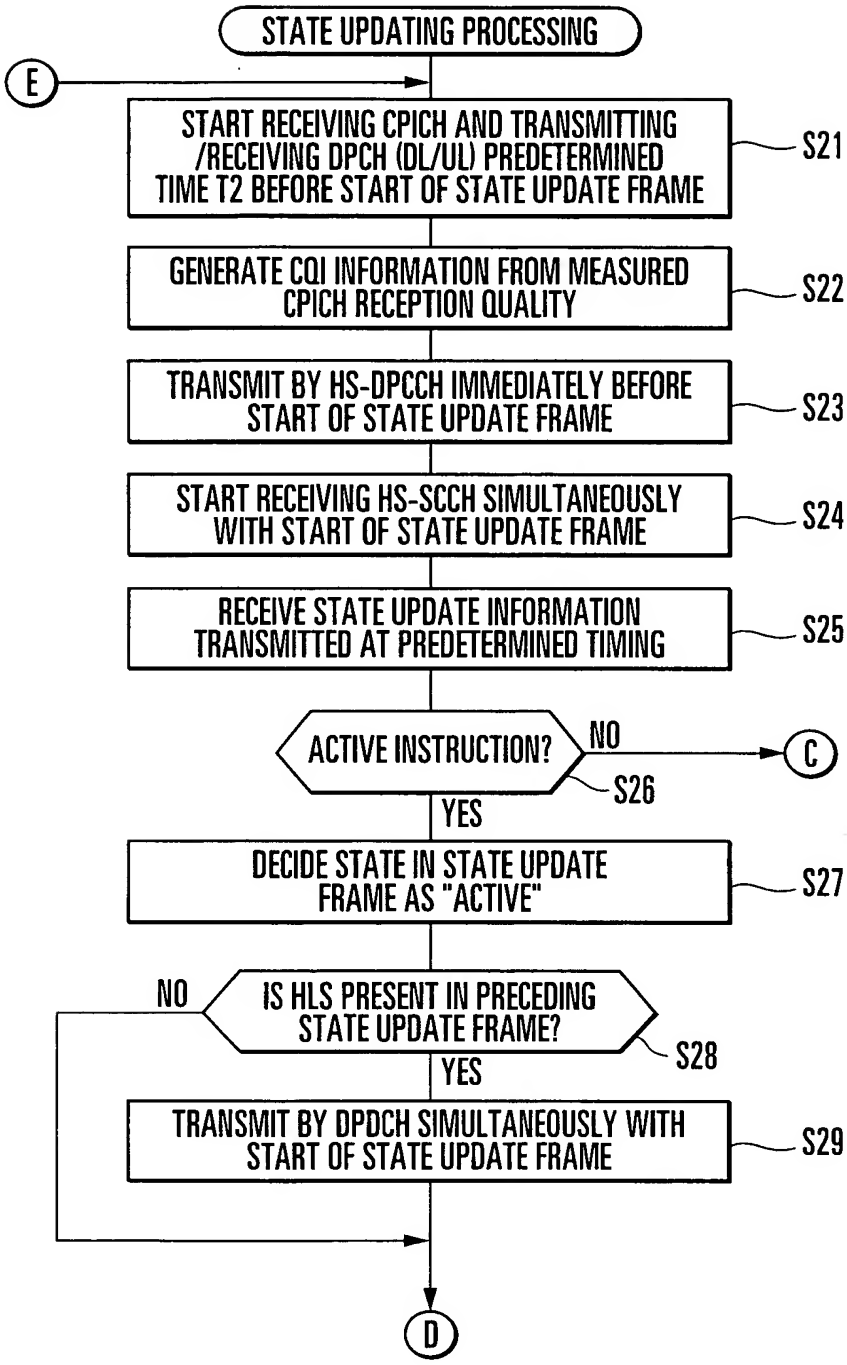
STATE UPDATING PROCESSING
E
START RECEIVING CPICH AND TRANSMITTING /RECEIVING DPCH (DL/UL) PREDETERMINED TIME T2 BEFORE START OF STATE UPDATE FRAME
S21
GENERATE CQI INFORMATION FROM MEASURED CPICH RECEPTION QUALITY
S22
TRANSMIT BY HS-DPCCH IMMEDIATELY BEFORE START OF STATE UPDATE FRAME
S23
START RECEIVING HS-SCCH SIMULTANEOUSLY WITH START OF STATE UPDATE FRAME
S24
RECEIVE STATE UPDATE INFORMATION TRANSMITTED AT PREDETERMINED TIMING
S25
ACTIVE INSTRUCTION?
NO
C
S26
YES
DECIDE STATE IN STATE UPDATE FRAME AS "ACTIVE"
S27
NO
IS HLS PRESENT IN PRECEDING STATE UPDATE FRAME?
S28
YES
TRANSMIT BY DPDCH SIMULTANEOUSLY WITH START OF STATE UPDATE FRAME
S29
D

FIG. 8

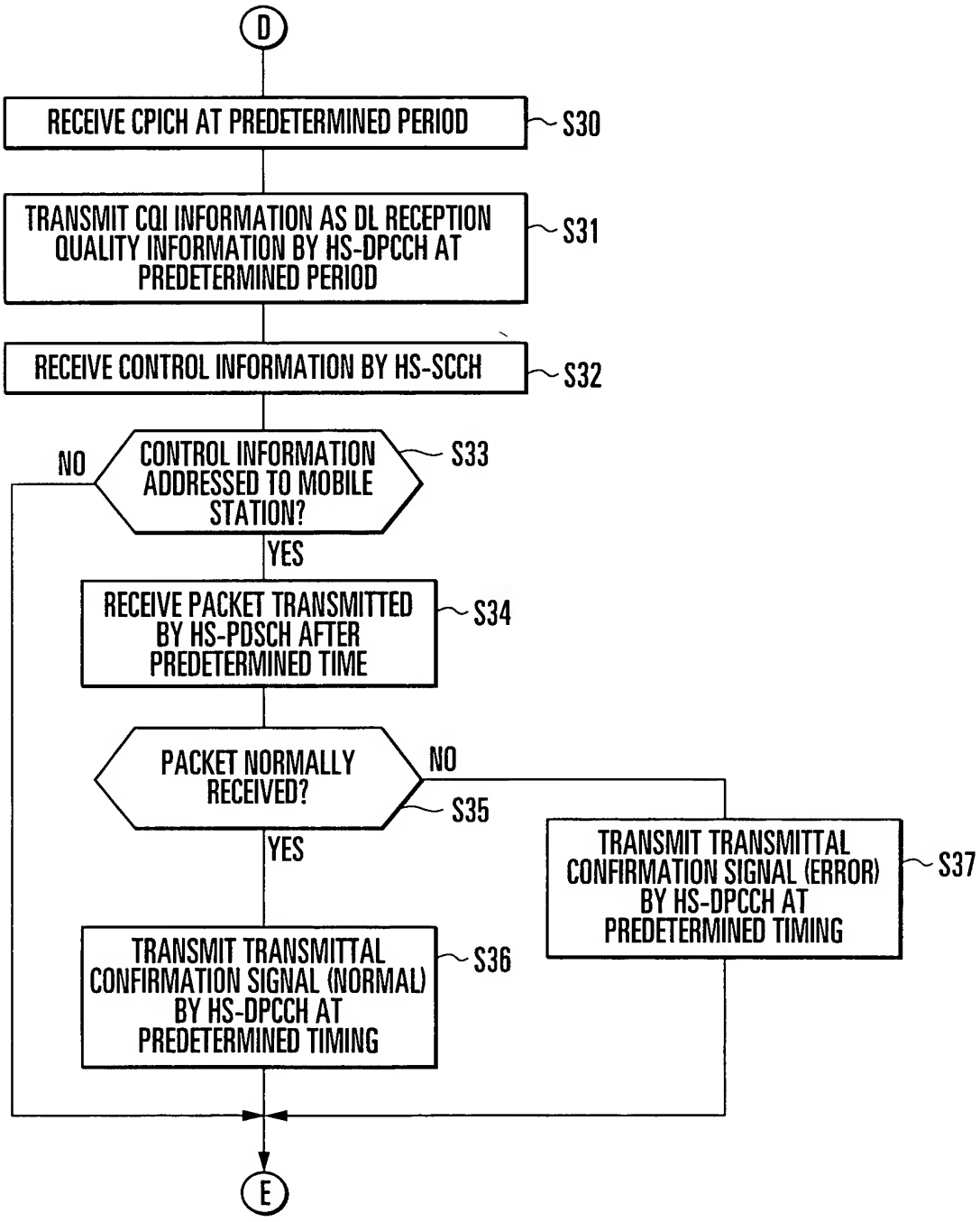
D
RECEIVE CPICH AT PREDETERMINED PERIOD
S30
TRANSMIT CQI INFORMATION AS DL RECEPTION QUALITY INFORMATION BY HS-DPCCH AT PREDETERMINED PERIOD
S31
RECEIVE CONTROL INFORMATION BY HS-SCCH
S32
NO
CONTROL INFORMATION ADDRESSED TO MOBILE STATION?
S33
YES
RECEIVE PACKET TRANSMITTED BY HS-PDSCH AFTER PREDETERMINED TIME
S34
PACKET NORMALLY RECEIVED?
NO
S35
YES
TRANSMIT TRANSMITTAL CONFIRMATION SIGNAL (ERROR) BY HS-DPCCH AT PREDETERMINED TIMING
S37
TRANSMIT TRANSMITTAL CONFIRMATION SIGNAL (NORMAL) BY HS-DPCCH AT PREDETERMINED TIMING
S36
E

FIG. 9

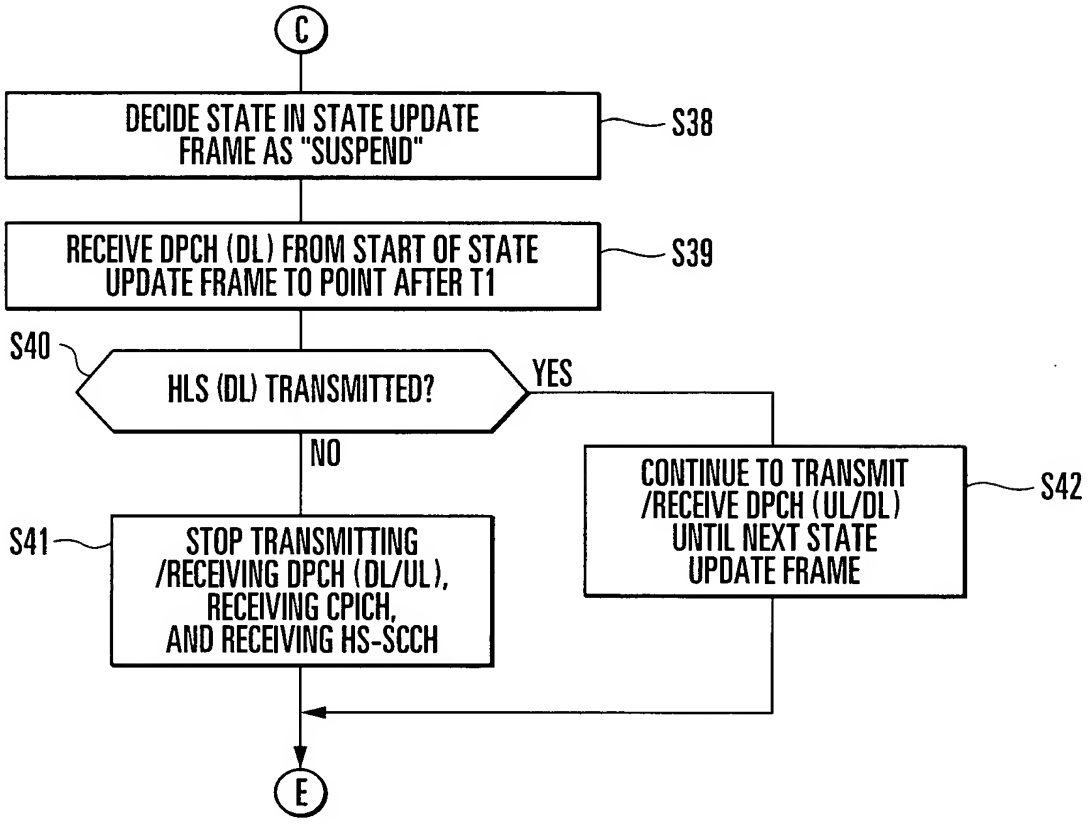
C
DECIDE STATE IN STATE UPDATE FRAME AS "SUSPEND"
S38
RECEIVE DPCH (DL) FROM START OF STATE UPDATE FRAME TO POINT AFTER T1
S39
S40
HLS (DL) TRANSMITTED?
YES
NO
CONTINUE TO TRANSMIT /RECEIVE DPCH (UL/DL) UNTIL NEXT STATE UPDATE FRAME
S42
S41
STOP TRANSMITTING /RECEIVING DPCH (DL/UL), RECEIVING CPICH, AND RECEIVING HS-SCCH
E

FIG. 10

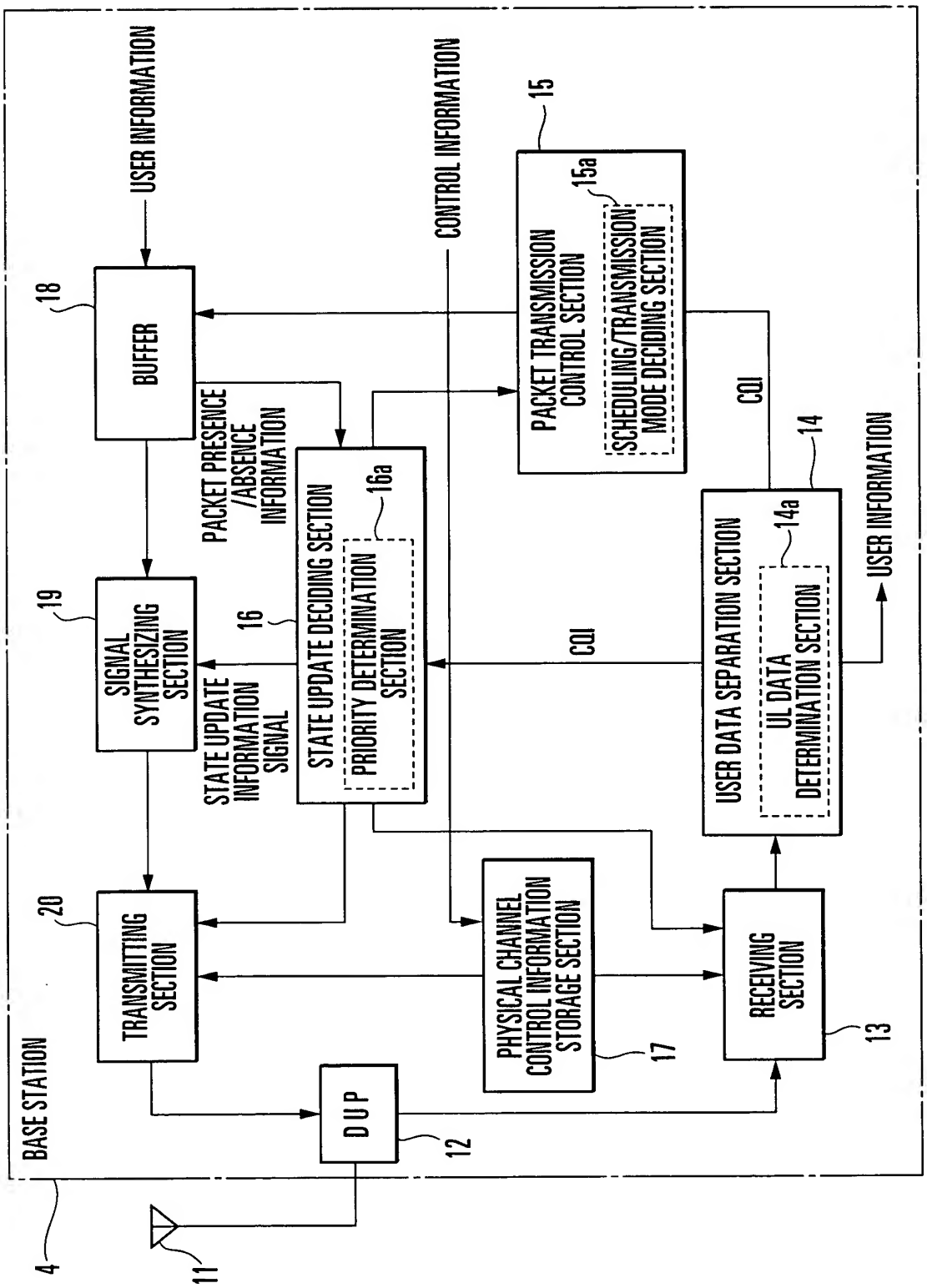
BASE STATION
4
11
DUP
12
TRANSMITTING SECTION
20
SIGNAL SYNTHESIZING SECTION
19
BUFFER
18
USER INFORMATION
STATE UPDATE INFORMATION SIGNAL
16
STATE UPDATE DECIDING SECTION
16a
PRIORITY DETERMINATION SECTION
PACKET PRESENCE /ABSENCE INFORMATION
CONTROL INFORMATION
PACKET TRANSMISSION CONTROL SECTION
15
15a
SCHEDULING/TRANSMISSION MODE DECIDING SECTION
CQI
CQI
USER DATA SEPARATION SECTION
14
14a
UL DATA DETERMINATION SECTION
USER INFORMATION
PHYSICAL CHANNEL CONTROL INFORMATION STORAGE SECTION
17
RECEIVING SECTION
13

FIG. 11

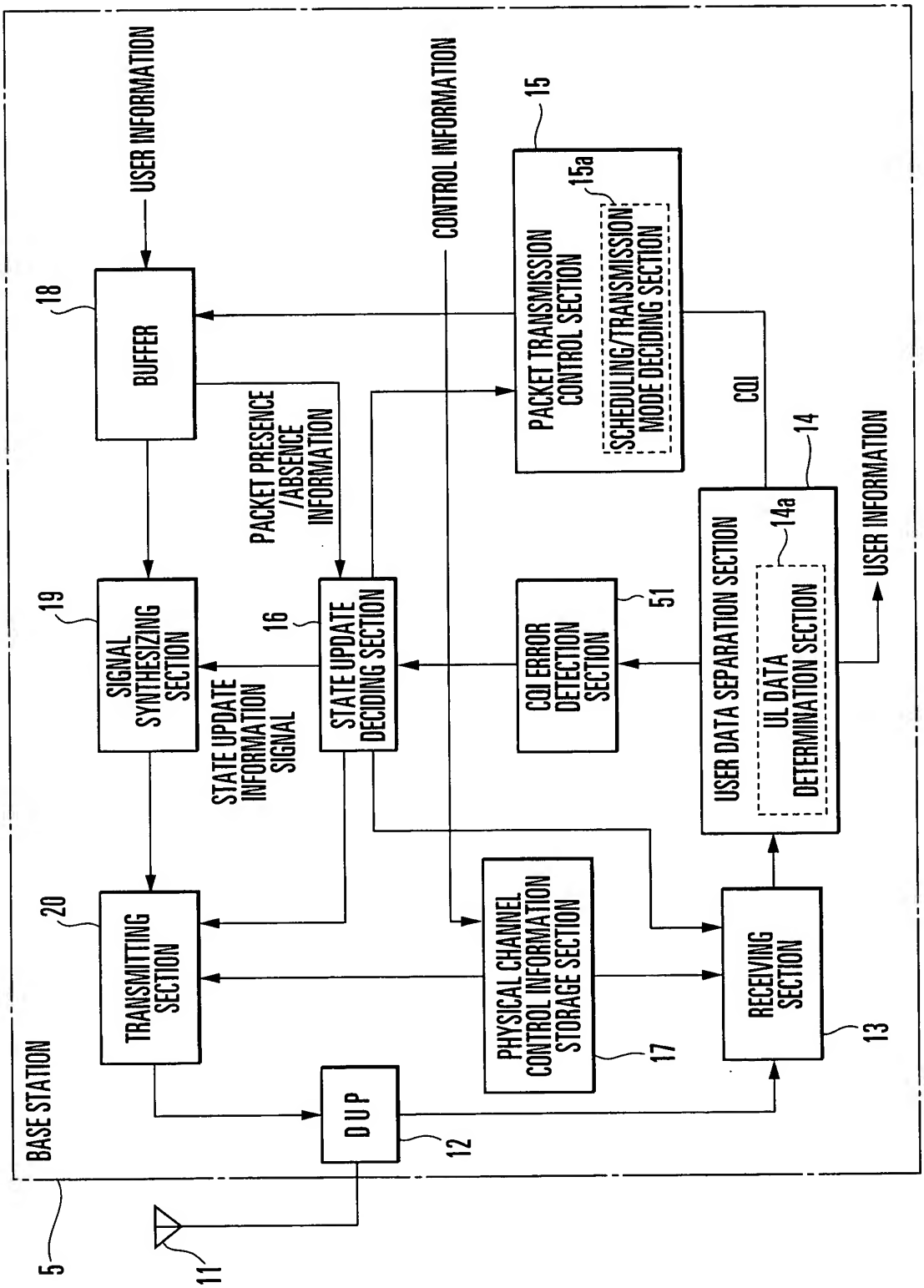
BASE STATION
5
11
DUP
12
TRANSMITTING SECTION
20
SIGNAL SYNTHESIZING SECTION
19
BUFFER
18
USER INFORMATION
STATE UPDATE INFORMATION SIGNAL
STATE UPDATE DECIDING SECTION
16
PACKET PRESENCE /ABSENCE INFORMATION
CONTROL INFORMATION
PHYSICAL CHANNEL CONTROL INFORMATION STORAGE SECTION
17
CQI ERROR DETECTION SECTION
51
PACKET TRANSMISSION CONTROL SECTION
15
SCHEDULING/TRANSMISSION MODE DECIDING SECTION
15a
CQI
RECEIVING SECTION
13
USER DATA SEPARATION SECTION
14
UL DATA DETERMINATION SECTION
14a
USER INFORMATION

FIG. 12

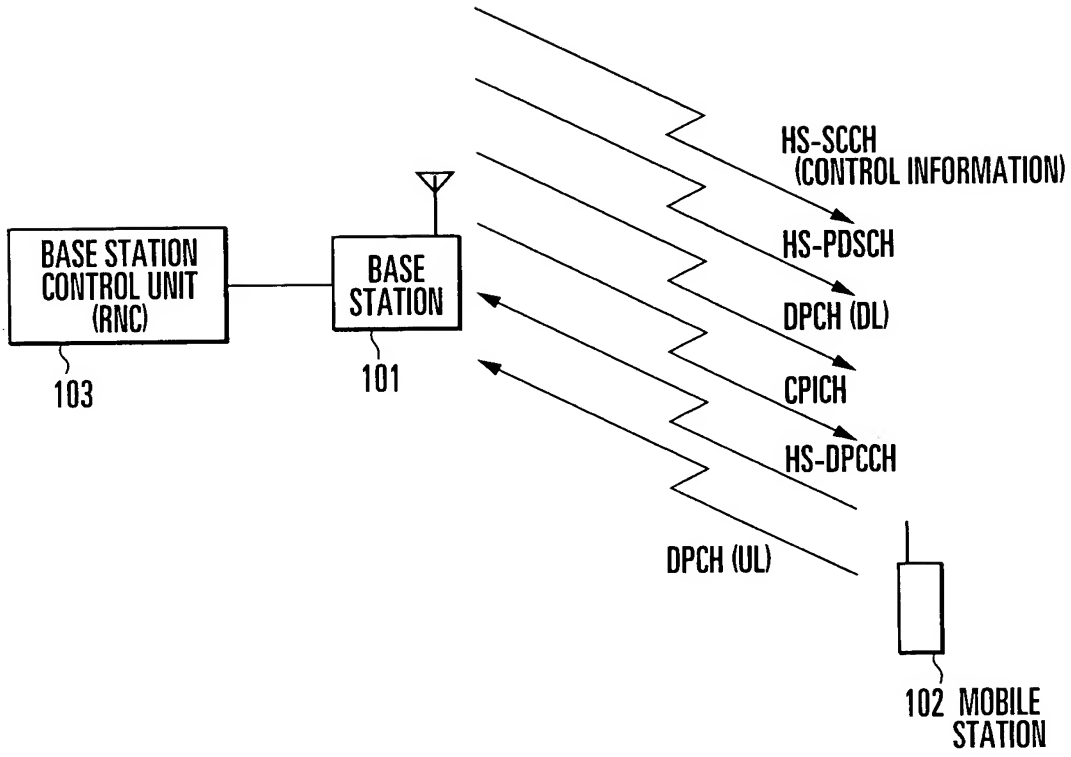
HS-SCCH
(CONTROL INFORMATION)
HS-PDSCH
DPCH (DL)
CPICH
HS-DPCCH
DPCH (UL)
BASE STATION
CONTROL UNIT
(RNC)
103
BASE
STATION
101
102 MOBILE
STATION

FIG. 13

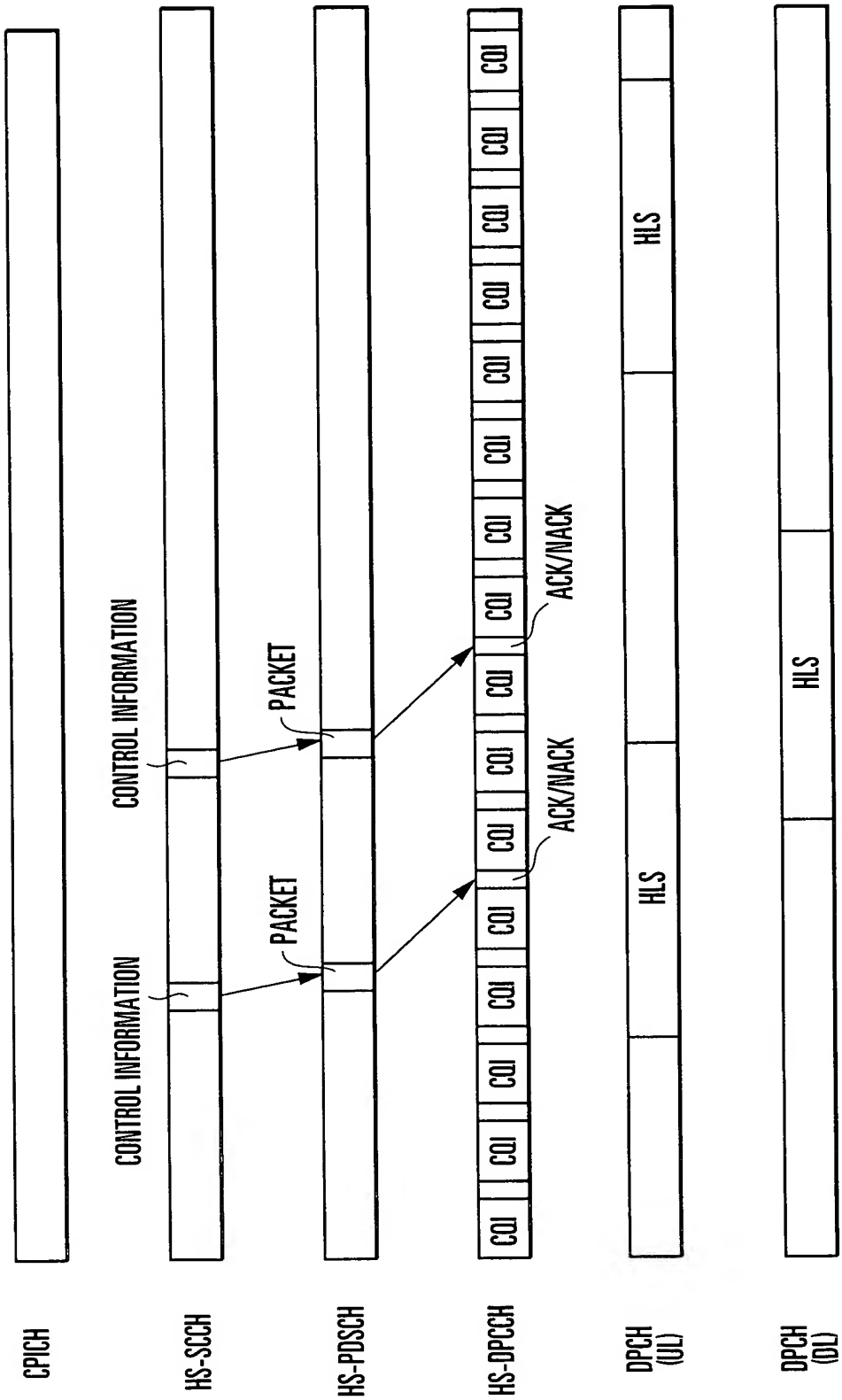
CPICH
HS-SCCH
HS-PDSCH
HS-DPCCH
DPCH (UL)
DPCH (DL)
CONTROL INFORMATION
CONTROL INFORMATION
PACKET
PACKET
ACK/NACK
ACK/NACK
CQI
HLS
HLS
HLS

FIG. 14